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|--|--|--|--|---|--|
| <b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>   |  | Docket Number (Optional)<br><br>VM 03-009-US |  |   |  |
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]<br><br>on _____<br><br>Signature _____<br><br>Typed or printed name _____  | Application Number<br><br>10/656,478   | Filed<br><br>September 5, 2003               |  |   |  |
|  | First Named Inventor<br><br>Hassan MOSTAFAVI   |  |  |   |  |
|  | Art Unit<br><br>2624   | Examiner<br><br>Andrae S. Allison            |  |   |  |
| <p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s).<br/>Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <table style="width: 100%; border: none;"><tr><td style="width: 50%; vertical-align: top; padding-bottom: 10px;"><input type="checkbox"/> applicant/inventor.<br/><br/><input type="checkbox"/> assignee of record of the entire interest.<br/>See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.<br/>(Form PTO/SB/96)<br/><br/><input checked="" type="checkbox"/> attorney or agent of record.<br/>Registration number <u>51,541</u><br/><br/><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34.<br/>Registration number if acting under 37 CFR 1.34 _____</td><td style="width: 50%; vertical-align: top; padding-bottom: 10px; border-left: 1px solid black; padding-left: 10px;"><div style="border-bottom: 1px solid black; margin-bottom: 5px;">/Gerald Chan/</div><div style="text-align: right; margin-bottom: 5px;">Signature</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;">Gerald Chan</div><div style="text-align: right; margin-bottom: 5px;">Typed or printed name</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;">408-321-8663</div><div style="text-align: right; margin-bottom: 5px;">Telephone number</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;">January 5, 2011</div><div style="text-align: right;">Date</div></td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.<br/>Submit multiple forms if more than one signature is required, see below*.</p> |  |  |  | <input type="checkbox"/> applicant/inventor.<br><br><input type="checkbox"/> assignee of record of the entire interest.<br>See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.<br>(Form PTO/SB/96)<br><br><input checked="" type="checkbox"/> attorney or agent of record.<br>Registration number <u>51,541</u><br><br><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34.<br>Registration number if acting under 37 CFR 1.34 _____ | <div style="border-bottom: 1px solid black; margin-bottom: 5px;">/Gerald Chan/</div> <div style="text-align: right; margin-bottom: 5px;">Signature</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Gerald Chan</div> <div style="text-align: right; margin-bottom: 5px;">Typed or printed name</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">408-321-8663</div> <div style="text-align: right; margin-bottom: 5px;">Telephone number</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">January 5, 2011</div> <div style="text-align: right;">Date</div> |
| <input type="checkbox"/> applicant/inventor.<br><br><input type="checkbox"/> assignee of record of the entire interest.<br>See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.<br>(Form PTO/SB/96)<br><br><input checked="" type="checkbox"/> attorney or agent of record.<br>Registration number <u>51,541</u><br><br><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34.<br>Registration number if acting under 37 CFR 1.34 _____  | <div style="border-bottom: 1px solid black; margin-bottom: 5px;">/Gerald Chan/</div> <div style="text-align: right; margin-bottom: 5px;">Signature</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Gerald Chan</div> <div style="text-align: right; margin-bottom: 5px;">Typed or printed name</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">408-321-8663</div> <div style="text-align: right; margin-bottom: 5px;">Telephone number</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">January 5, 2011</div> <div style="text-align: right;">Date</div> |  |  |   |  |
| <input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.  |  |  |  |   |  |

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:

**Hassan Mostafavi**

Serial No.: 10/656,478

Filed: September 5, 2003

For: SYSTEMS AND METHODS FOR  
TRACKING MOVING TARGETS AND  
MONITORING OBJECT POSITIONS

Group Art Unit: 2624

Examiner: Allison, Andrae S.

Confirmation No.: 8695

**NOTICE OF APPEAL & REQUEST FOR PRE-APPEAL BRIEF CONFERENCE**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir/Madam:

In response to the Advisory Action mailed November 15, 2010, Applicant herein submits a Notice of Appeal pursuant to 37 C.F.R. § 41.31(a), and respectfully requests a pre-appeal brief conference.

I. Claim Rejections under 35 U.S.C. § 103 based on Hipp and Ito

Claims 1-4, 6-9, 12-14, 18, 20, 23-27, 31-36, and 61-63 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. 2003/0086596 (Hipp) in view of U.S. Patent No. 5,535,289 (Ito). Applicant herein addresses claim 22 as well since the claim 22 is discussed on page 6 of the Office Action.

Claim 1 recites that the act of enhancing is performed such that an image of the moving object is enhanced relative to an image of a relatively stationary object *if* the moving object moves relative to the stationary object (Emphasis Added). Claims 22, 31, and 63 recite similar limitations. According to page 5 of the Office Action, figure 4a of Hipp allegedly discloses the above limitations. Applicant respectfully disagrees.

Applicant notes that claims 1, 22, 31, and 63 describe that the act of enhancing is *conditioned upon* whether the object moves or not (note the limitation “if”). Applicant has

thoroughly reviewed the entire disclosure of Hipp, and respectfully submits that there is nothing in figure 4a (nor in the rest) of Hipp that discloses or suggests enhancing an image *if* the object moves relative to a stationary object. Rather, figure 4a illustrates an example of radiographic image showing a search model region (see paragraph 41).

Furthermore, Hipp teaches identifying a specific vertebrae, and tracking such vertebrae in the images (see paragraph 102). Thus, in Hipp, once the vertebrae is identified, any image enhancement that is performed is always for the specific vertebrae – regardless of whether it moves or not. Therefore, Hipp does not disclose, and in fact *teaches away* from, enhancing an image that is conditioned upon object movement. Applicant has previously pointed out this deficiency of Hipp, but does not appear to have been considered and addressed by the Examiner.

According to the Office Action and the Advisory Action, Hipp discloses enhancing a moving object that moves relative to a stationary background. However, Applicant respectfully notes that such characterization of Hipp does not meet the above claimed limitations. This is because as discussed, Hipp teaches always enhancing a target object, regardless of whether it moves or not. Thus, just because the target object happens to moves relative to a background, it does not mean that the act of enhancing the target object is *conditioned upon* whether it moves or not. There is simply no disclosure in Hipp that any enhancing act is conditioned upon movement of an object. Again, this deficiency of Hipp has not been considered and addressed by the Examiner.

Ito also does not disclose or suggest the above limitations, and is not being relied upon for the disclosure of the above limitations. Since none of the cited references discloses or suggests the above limitations, any purported combination of these references cannot result in the subject matter of claims 1, 22, 31, and 63. For at least the foregoing reasons, Applicant submits that the prima facie case of the § 103 rejection for claims 1, 22, 31, and 63 based on Hipp and Ito has not been established.

## II. Claim Rejections under 35 U.S.C. § 103 based on Holliman and Hipp

Claims 40, 43, 46, 47-49, 50, 53, and 56 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,075,557 (Holliman) in view of Hipp.

Claim 40 recites that the act of determining whether the object has moved comprises using a contrast associated with the first *composite image* (which is obtained by performing a

subtraction function) (Emphasis Added). Claims 50 and 53 recite similar limitations. According to page 17 of the Office Action, element 49 in figure 12 of Holliman allegedly discloses a composite image. However, Applicant respectfully submits that element 49 of Holliman does not disclose or suggest any composite image. Rather, element 49 of Holliman actually discloses template matching between a template and an image area (see figure 12), and therefore, the element 49 does not disclose or suggest a composite image.

Also, contrary to the Examiner's characterization of element 49 that it discloses a composite image, Applicant respectfully notes that element 49 in figure 12 actually states "Template matching by finding *the position where there is a best correlation* between the template and the underlying image area" (Emphasis Added). Thus, the so-called template matching in Holliman actually involves determining correlation between the template and an image area, and does not involve determining any *composite image*. Notably, the correlation determination results in a "correlation value" (see element 50 of figure 12), which is a number, and therefore, is clearly not a composite "image." In addition, "the position" in the above cited passage for element 49 clearly indicates that the matching is performed to determine a positional value, which is not a composite image.

Pages 4 and 17 of the Office Action also cites to column 11, lines 33-38 of Holliman for the disclosure of a "differential movement method," and states that such method "is used to create a composite image between the template and the input image." In the Advisory Action, the Examiner further emphasized that the template is an "image." However, even if the template is an image, Holliman teaches comparing such template "image" with an input image to determine a positional value. In particular, as discussed, Holliman discloses template matching that results in a single value, not a composite image. Thus, the differential movement method for the alleged template matching actually results in a value, not an image. This is evidenced by the description in Holliman, describing that the cross-correlation value at the best-matched position resulted from the template matching "would be 1" (c14:20-21), which value is clearly not a composite image. Thus, Holliman clearly does not disclose or suggest the above limitations.

The method disclosed in Holliman, which is allegedly described by the Examiner as the differential movement method, is not for determining any image (much less, a composite image). This is further evidenced by the disclosure on column 11, lines 33-38 of Holliman, which describes that the differential movement method "determines the movement of the target image

between consecutive fields *and adds this to the position* found by local template matching. . .” (Emphasis Added). Thus, the so-called differential method actually results in a positional movement value, not a composite image.

Again, Applicant notes that the above deficiencies of Holliman were discussed in the previous response, but have not been considered and addressed by the Examiner.

Since Holliman and Hipp do not disclose or suggest the above limitations, any purported combination of these references cannot result in the subject matter of claims 40, 50, and 53. For at least the foregoing reasons, Applicant respectfully submits that the prima facie case of the § 103 rejection for claims 40, 50, and 53 based on Holliman and Hipp has not been established.

### III. Claim Rejections under 35 U.S.C. § 103 based on Hipp and Abe

Claims 64-66 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Holliman in view of Hipp, and further in view of U.S. Patent No. 5,134,472 (Abe).

Claim 64 recites that the act of determining whether the object has moved *does not require a determination of an amount of movement by the object* (Emphasis Added). Claim 65 recites that the means for determining whether the object has moved is configured to determine whether the object has moved *without determining an amount of movement by the object* (Emphasis Added). Claim 66 recites that the act of determining whether the object has moved *does not require a determination of an amount of movement by the object* (Emphasis Added).

Applicant agrees with the Examiner that Holliman and Hipp do not disclose or suggest the above limitations. According to the Office Action, column 1, lines 43-55 of Abe allegedly disclose the above limitations. Applicant respectfully disagrees. The cited passage of Abe actually discloses:

Accordingly, it is an object of the present invention to provide an apparatus that correctly detects a moving image within an image area corresponding to a moving object within the image area. It is a further object of the present invention to avoid erroneous indications of moving objects within an image area.

It is a further object of the present invention to provide an apparatus that detects the entire image of a moving object.

In accordance with the present invention, the foregoing objects, among others, are achieved by providing an apparatus for detecting a moving image . . .

Thus, the above cited passage actually does not disclose or suggest that an amount of movement of the object is not determined. Note that a mere silence of a limitation by a reference cannot

anticipate a negative of such limitation (in other words, just because the cited passage of Abe does not mention object movement, it does not mean that the method of Abe does not involve determining an object movement). This is especially the case with Abe because the cited passage is a summary of the method, which does not provide all the details. Rather, according to the detail description, Abe in fact does disclose using position data in its algorithm (See for example, claim 7 stating “generating at least two position signals corresponding to at least two positions of the moving object.”). Also, column 8, line 31 of Abe discloses  $YE_f - YE_n$ , which corresponds to an amount of movement of object from coordinate  $YE_n$  to coordinate  $YE_f$  (see figure 8B).

Applicant notes that the above deficiencies of Abe were discussed in the previous response, but have not been considered and addressed by the Examiner.

Since Holliman, Hipp, and Abe do not disclose or suggest the above limitations, any purported combination of these references cannot result in the subject matter of claims 64-66. For at least the foregoing reasons, Applicant submits that the prima facie case of the § 103 rejection for claims 64-66 based on Holliman, Hipp, and Abe has not been established.

The Commissioner is authorized to charge any fees due in connection with the filing of this document to Vista IP Law Group’s Deposit Account No. **50-1105**, referencing billing number **VM 03-009-US**.

Respectfully submitted,

DATE: January 5, 2011

By: /Gerald Chan/  
Gerald Chan  
Registration No. 51,541